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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,240	01/11/2005	Kaisa Putkisto	METSO-22	9092
36528	7590	03/31/2006	EXAMINER	
STIENNON & STIENNON 612 W. MAIN ST., SUITE 201 P.O. BOX 1667 MADISON, WI 53701-1667			PARKER, FREDERICK JOHN	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/507,240	Applicant(s) PUTKISTO ET AL.	
	Examiner Frederick J. Parker	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/9/04;5/6/05</u> . | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino

acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The title is too generic and not specifically directed to the claimed inventive subject matter.

4. The disclosure is objected to because of the following informalities: on page 1, lines 13-14, it is contradictory to disclose a "grounding electrode" to have a predetermined potential other than ground. If so, its not a grounding electrode. Appropriate correction is required.

Claim Objections

5. Claims 1-7 objected to because of the following informalities: use of the phrase "characterized in that" should be replaced with transitional language consistent with U.S. Patent practice. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2,3,7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 2 is vague and indefinite because it is unclear how an "endless conductive wire" can be a rotating ground electrode, the length of the endless wire being prohibitive.
- Claim 3 is vague and indefinite because (1) it is unclear how a ground electrode can be other than at ground potential, e.g. how it can be at another potential and since be a

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grounding electrode, and (2) it is unclear what is intended by the step “finishing the powder layer”.

- Claim 7 is vague and indefinite because the use of the relative term “hard” fails to convey the nature/ hardness of the heated roll 3, “hard” would not be ascertainable by the skilled artisan, and it is not defined by the specification.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Taylor-Brown et al US 4060648.

The reference discloses in fig. 2 and its explanatory text in conjunction with the embodiment of col. 4, 48-54 a rotating roller 1 at ground potential (hence a “grounding electrode”) which is on the opposite side of a plastics web 19 from where electrically charged particles are applied.

10. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Jackson et al US 3000752.

The reference discloses in fig. 2 and its explanatory text rotating rollers 12,13 which are electrically grounded (hence a “grounding electrode”) which is on the opposite side of a metal

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strip 9 (= web) from where electrically charged particles are applied via gas-particle stream channel 7.

11. Claims 3,4,6 are rejected under 35 U.S.C. 102(b) as being anticipated by Taylor-Brown.

Taylor-Brown discloses a method of uniformly electrostatically powder coating a continuous web (metal, paper, plastic; col. 2, 14-17) comprising feeding the traveling web 19 using rollers, and applying electrostatically charged particles 8 on the opposite side of the web relative to rotating roller 1, which may be grounded (col. 4, 48-53). Roller 1 may also be charged and drum 4 grounded to attract charged particles to the web, which meets the limitation of “ground potential or another predetermined potential” of claim 3. The grounding device is a rotating roller per claim 6. The description of col. 4, 3-14 and elsewhere meet the conventional meaning of a corona charging electrode per claim 4. Coated web is then finished, see col. 4, 25-29.

12. Claims 3,4,6 are rejected under 35 U.S.C. 102(B) as being anticipated by Jackson.

Jackson teaches electrostatically applying thin, uniform particulate substances to metal strip 9 (by definition, a web), in which electrically grounded rotating rollers 12,13 (“grounding electrode”) (col. 4, 63-67) are located oppositely the strip relative to where charged particles are applied. Particles are pre-charged by corona discharge means (wires, rods) per claim 4 (col. 3, 28-45) and propelled to the substrate to form a powder coating on the strip, which is then finished by a plate electrode to promote evenness of the particle distribution and the product is coiled.

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Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor-Brown or Jackson in view of Liberto (ed.).

Taylor-Brown and Jackson are cited for the same reasons previously discussed, which are incorporated herein. Tribo charging is not disclosed.

The Liberto handbook discloses that it is conventional to charge powders to be electrostatically applied to substrates using either corona charging or tribo charging because both are “dependant on effectively applying charge to the surface of the individual powder particles”, thereby establishing an equivalence between the two charging methods for powders being electrostatically applied to a substrate.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the methods of Taylor-Brown or Jackson by utilizing tribo charging in place of

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corona charging of the powder because Liberto teaches both charging methods will effectively apply charge to the individual powder particles being electrostatically applied to a substrate.

16. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor-Brown in view of Divigalpitiya et al 2002/0119255

Taylor-Brown is cited for the same reasons previously discussed, which are incorporated herein. A post-heat roller is not disclosed.

Taylor-Brown teaches that after particle deposition to the web, the coated web is heated by an oven and moved between a rotating electrically grounded roller and rubber (= resilient") backup roller 18.

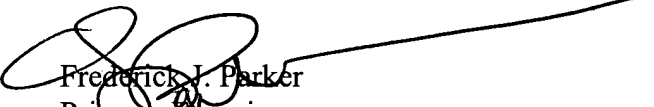
Divigalpitiya et al is also directed to applying particles onto webs, followed by heating the particle coated web to make it receptive to particles followed by movement through nip rollers (without limitation, but citing rubber/ rubber coated, or metal rollers, etc) to secure the particles [0054-0056]. The reference further teaches that heating may be carried out by a heated roller ("hot can"), oven, or radiation or induction heater. Thus the equivalence of an oven and heated roller to heat the particle coated web is established by the reference, and therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to carry out the method of Taylor-Brown and substitute the oven with a heated roller given the equivalence of the heating means established by Divigalpitiya et al, with the expectation of achieving a similar outcome given the equivalence of the heating means.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Frederick J. Parker
Primary Examiner
Art Unit 1762

fjp